



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/694,383

DATE: 09/17/2004

TIME: 11:40:49

Input Set : N:\CrF3\RULE60\10694383.raw

Output Set: N:\CRF4\09172004\J694383.raw

1 <110> APPLICANT: Kandimalla, Ekambar R.  
 2 Zhao, Qiuyan  
 3 Yu, Dong  
 4 Agrawal, Sudhir  
 5 <120> TITLE OF INVENTION: Modulation of Immunostimulatory Activity of  
 6 Immunostimulatory  
 7 Modified oligodeoxynucleotide phosphorothioate Analogs by  
 8 Positional Chemical Changes  
 9 <130> FILE REFERENCE: HYZ-479CP (47508.577)  
 10 <140> CURRENT APPLICATION NUMBER: US/10/694,383  
 11 <141> CURRENT FILING DATE: 2003-10-27  
 12 <150> PRIOR APPLICATION NUMBER: CURRENT APPLICATION NUMBER: US/09/965,116  
 W--> 13 <151> **PRIOR FILING DATE: CURRENT FILING DATE: 2002-03-08**  
 14 <150> PRIOR APPLICATION NUMBER: US 09/712,898  
 15 <151> PRIOR FILING DATE: 2000-11-15  
 16 <150> PRIOR APPLICATION NUMBER: US 60/235,452  
 17 <151> PRIOR FILING DATE: 2000-09-26  
 18 <150> PRIOR APPLICATION NUMBER: US 60/235,453  
 19 <151> PRIOR FILING DATE: 2000-09-26  
 20 <160> NUMBER OF SEQ ID NOS: 112  
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 18  
 25 <212> TYPE: DNA  
 26 <213> ORGANISM: Artificial Sequence  
 27 <220> FEATURE:  
 28 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs  
 29 <400> SEQUENCE: 1  
 30 ctatctgacg ttctctgt 18  
 32 <210> SEQ ID NO: 2  
 33 <211> LENGTH: 18  
 34 <212> TYPE: DNA  
 35 <213> ORGANISM: Artificial Sequence  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs  
 38 <220> FEATURE:  
 39 <221> NAME/KEY: modified\_base  
 40 <222> LOCATION: 9  
 41 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine  
 42 <400> SEQUENCE: 2  
 43 ctatctgacg ttctctgt 18  
 45 <210> SEQ ID NO: 3  
 46 <211> LENGTH: 18

ENTERED

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47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
51 <220> FEATURE:
52 <221> NAME/KEY: modified_base
53 <222> LOCATION: 10
54 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine
55 <400> SEQUENCE: 3
56     ctatctgacc ttctctgt                                     18
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59 <211> LENGTH: 18
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62 <220> FEATURE:
63 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
64 <220> FEATURE:
65 <221> NAME/KEY: modified_base
66 <222> LOCATION: 9
67 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine
68 <400> SEQUENCE: 4
69     ctatctgacg ttctctgt                                     18
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 18
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74 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
77 <220> FEATURE:
78 <221> NAME/KEY: modified_base
79 <222> LOCATION: 10
80 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine
81 <400> SEQUENCE: 5
82     ctatctgacc ttctctgt                                     18
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85 <211> LENGTH: 16
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified
90     oligodeoxynucleotide
91     phosphorothioate
92 <400> SEQUENCE: 6
93     aaggtcgagc gttctc                                     16
95 <210> SEQ ID NO: 7
96 <211> LENGTH: 18
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:

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100 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified
101     oligodeoxynucleotide
102     phosphorothioate
103 <400> SEQUENCE: 7
104     atggcgacacg ctgggaga                                18
106 <210> SEQ ID NO: 8
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108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
112 <400> SEQUENCE: 8
113     cctactagcg ttctcatc                                18
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 18
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
121 <220> FEATURE:
122 <221> NAME/KEY: modified_base
123 <222> LOCATION: 10
124 <223> OTHER INFORMATION: g = 1',2'-Dideoxyribose
125 <400> SEQUENCE: 9
126     cctactagcg ttctcatc                                18
128 <210> SEQ ID NO: 10
129 <211> LENGTH: 18
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
134 <220> FEATURE:
135 <221> NAME/KEY: modified_base
136 <222> LOCATION: 8
137 <223> OTHER INFORMATION: g = 1',2'-Dideoxyribose
138 <400> SEQUENCE: 10
139     cctactagcg ttctcatc                                18
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145 <220> FEATURE:
146 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
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148 <221> NAME/KEY: modified_base
149 <222> LOCATION: 7
150 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
151 <400> SEQUENCE: 11
152     cctactagcg ttctcatc                                18

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Input Set : N:\Crf3\RULE60\10694383.raw

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160 <220> FEATURE:
161 <221> NAME/KEY: modified_base
162 <222> LOCATION: 6
163 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
164 <400> SEQUENCE: 12
165      cctactagcg ttctcatc                                     18
167 <210> SEQ ID NO: 13
168 <211> LENGTH: 18
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
173 <220> FEATURE:
174 <221> NAME/KEY: modified_base
175 <222> LOCATION: 5
176 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
177 <400> SEQUENCE: 13
178      cctactagcg ttctcatc                                     18
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182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
186 <220> FEATURE:
187 <221> NAME/KEY: modified_base
188 <222> LOCATION: 4
189 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
190 <400> SEQUENCE: 14
191      cctactagcg ttctcatc                                     18
193 <210> SEQ ID NO: 15
194 <211> LENGTH: 18
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
199 <220> FEATURE:
200 <221> NAME/KEY: modified_base
201 <222> LOCATION: 4
202 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
203 <400> SEQUENCE: 15
204      cctactagcc ttctcatc                                     18
206 <210> SEQ ID NO: 16

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207 <211> LENGTH: 18
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
212 <220> FEATURE:
213 <221> NAME/KEY: modified_base
214 <222> LOCATION: 11
215 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
216 <400> SEQUENCE: 16
217      cctactagcg ttctcatc                                     18
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223 <220> FEATURE:
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226 <221> NAME/KEY: modified_base
227 <222> LOCATION: 12
228 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
229 <400> SEQUENCE: 17
230      cctactagcg ttctcatc                                     18
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233 <211> LENGTH: 18
234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
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238 <220> FEATURE:
239 <221> NAME/KEY: modified_base
240 <222> LOCATION: 13
241 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
242 <400> SEQUENCE: 18
243      cctactagcg ttctcatc                                     18
245 <210> SEQ ID NO: 19
246 <211> LENGTH: 18
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
251 <220> FEATURE:
252 <221> NAME/KEY: modified_base
253 <222> LOCATION: 14
254 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
255 <400> SEQUENCE: 19
256      cctactagcg ttctcatc                                     18
258 <210> SEQ ID NO: 20
259 <211> LENGTH: 18

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/694,383

DATE: 09/17/2004

TIME: 11:40:50

Input Set : N:\Crf3\RULE60\10694383.raw

Output Set: N:\CRF4\09172004\J694383.raw

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